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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,527	03/30/2004	Edward Hosung Park	03-0055	6135
29293	7590	03/09/2006	EXAMINER	
FREUDENBERG-NOK GENERAL PARTNERSHIP LEGAL DEPARTMENT 47690 EAST ANCHOR COURT PLYMOUTH, MI 48170-2455			ASINOVSKY, OLGA	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/813,527

Applicant(s)

PARK, EDWARD HOSUNG

Examiner

Olga Asinovsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 23, 40, 49, 54 and 59-84 is/are pending in the application.
- 4a) Of the above claim(s) 15, 23, 40, 49, 54 and 59-84 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-14, in the reply filed on 12/09/2005 is acknowledged. The traversal is on the ground(s) that the inventions are related and would not impose a serious burden on the Patent Office. This is not found persuasive because each group recites a specified requirement such as a particles size definition for the elastomer phase or curative agent, or a recycling scrap material, or a shaped article form of the resulting polymer and the specified process conditions. In light of the fact that a fluorinated thermoplastic polymer and a fluorocarbon elastomer is/are depending on the specific structure/type of the fluorine groups, the performance and the characteristics of the resulting compositions are different.

The requirement is still deemed proper and is therefore made FINAL.

The cancellation of claims 16-22, 24-39, 41-48, 50-53 and 55-58 is noted.

2. Newly submitted claims 59-84 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 59-60 and 78-84 are related to the invention of Group II. Claims 61-63 are related to the invention of Group III. Claims 64-72 are related to the invention of Group IV. Claims 73-77 are related to the invention of Group VI.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 59-84 are withdrawn from consideration

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as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Since claim 22 is cancelled and claim 33 is a non-elected invention, there is no election of species.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rees U.S. Patent 5,006,594.

The rejection is set forth at pages 7-10 of the office action mailed on 09/09/2005, and it is incorporated here by reference.

Applicant amends claim 1 by inserting that a fully fluorinated thermoplastic material is melt-processable, and a partially fluorinated thermoplastic polymer is melt-processable.

In the original specification at page 18, the inventor discloses that the fluorinated polymer can have the melting point. The melting point of individual grades depends on the exact structure. There is no structure for a fully fluorinated thermoplastic polymer, nor for a partially fluorinated thermoplastic polymer in claim 1. In the specification [0054] "fully fluorinated thermoplastic polymers are characterized by relatively high

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melting points.” In the paragraph [0055] “partially fluorinated fluoroplastics have relatively lower melting points.”

A copolymer of tetrafluoroethylene and perfluoroalkyl vinyl ether, col. 2, lines 43-45 is readable for being a fully fluorinated polymer consisting of PFA in the present claim 14.

It is presumably, that said copolymer is a melt-processible.

The melt-processible crystalline fluorocarbon resins are readable for being a partially fluorinated thermoplastic polymer. The amorphous crosslinked=cured fluoroelastomer is readable for being cured fluorocarbon elastomer in the present claims, col. 3, line 58.

The resulting composition is a melt-processible. It would have been obvious to one of ordinary skill in the art to select a fully fluorinated melt-processible thermoplastic copolymer such as a copolymer of TFE and perfluoroalkyl vinyl ether in Rees invention, and, thereby, obtain the claimed requirement, because the selection of a melt-processable fully fluorinated polymer is depending on the exact structure of said fully fluorinated polymer, and since this copolymer is readable in the present claim 14.

Response to Arguments

5. Applicant's arguments filed 12/09/2005 have been fully considered but they are not persuasive. The argument is that Rees does not disclose or suggest the “melt-processable” characteristic for partially and fully fluorinated thermoplastic polymers of the amended claims. The argument is that Rees discloses a non-melt processible polytetrafluoroethylene (PTFE) powder in the amount of 1-5 wt.% as filler, col. 2, lines

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40-41. The PTFE as filler can be present in a rubber composition. Rees discloses that a tetrafluoroethylene and a comonomer selected such as a perfluoro(alkyl vinyl ether), col. 2, lines 43-45 can be present. The copolymer of TFE and said comonomer of perfluoro (alkylvinyl ether) is readable in the present claim 14 for being a fully fluorinated polymer selected from a PFA, wherein the PFA is a copolymer of TFE and perfluoropropyl vinyl ether [0053] as referring to the original specification (as a dictionary for the definition of PFA). The amorphous crosslinked=cured fluoroelastomer is readable for being cured fluorocarbon elastomer in the present claims, col. 3, line 58. The resulting composition is a melt-processible. It would have been obvious to one of ordinary skill in the art to select a fully fluorinated melt-processible thermoplastic copolymer such as a copolymer of TFE and perfluoroalkyl vinyl ether in Rees invention, and, thereby, obtain the claimed requirement, because the selection of a melt-processable fully fluorinated polymer is depending on the exact structure of said fully fluorinated polymer, and since this copolymer is readable in the present claim 14.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

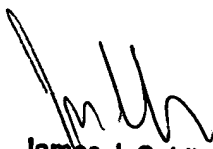
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 571-272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

O.A

March 05, 2006


James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700

Olga Asinovsky
Examiner
Art Unit 1711